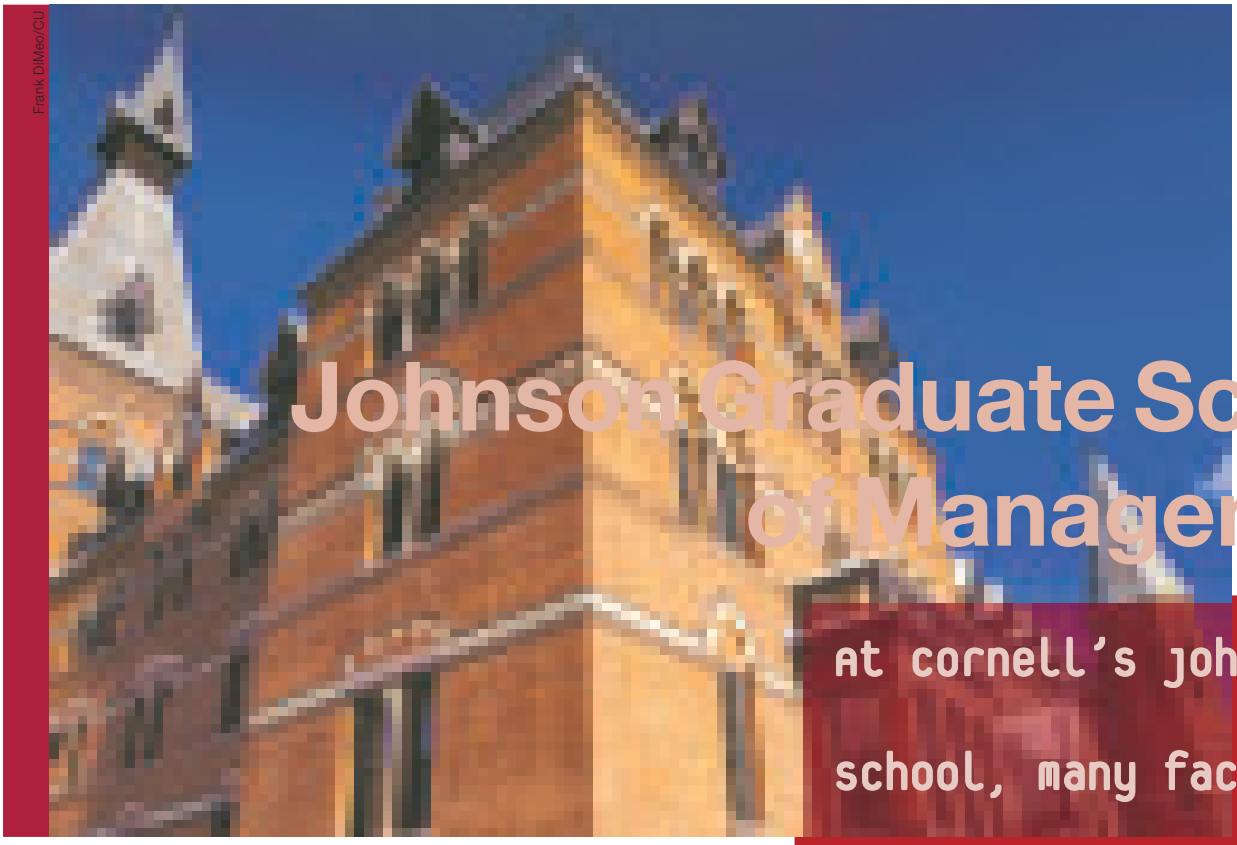

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Johnson Graduate School of Management

At Cornell's Johnson School, many faculty are actively pursuing research into the foundations of cooperative and ethical behavior.

Dede Hatch

David Sally, Johnson Graduate School of Management, argues that people will cooperate with one another in prisoner's dilemmas if they can manage somehow to identify and sympathize sufficiently with one another.

At the Core of Social Science Research in the Johnson School Is the Study of Cooperative and Ethical Behavior

With corporate malfeasance so much in the news these days, many people have been quick to indict the MBA training received by America's corporate leaders. The same critics might thus be surprised to learn that faculty in the nation's leading business schools have long been at the forefront of social science research into the foundations of cooperative and ethical behavior.

At Cornell's Johnson School, for example, literally dozens of faculty are actively pursuing research in this area, and many of their findings have made their way into the MBA curriculum, both here and at other schools. Two examples are David F. Sally and Kathleen M. O'Connor.

At the core of Sally's research is a series of studies that advance thinking about cooperation in the one-shot prisoner's dilemma, a simple game in which each player must choose whether to cooperate or defect. From a social perspective, cooperation is the preferred choice, for if each player cooperates, each will receive a higher reward than if each defects. Yet from each individual's perspective, there remains a compelling temptation to defect, for that choice yields a higher reward irrespective of the choice made by one's partner. As in the familiar stadium metaphor, each stands to get a better view, yet no one sees better when all stand than if all had remained seated. Because the prisoner's dilemma encapsulates the incentives that often explain the conflict between individual and group interests, it is perhaps the most intensely studied game in the behavioral sciences. Examples of prisoner's dilemmas include corporate earnings reporting, military arms races, environmental pollution, and overfishing of coastal waters.

Traditional rational choice theory predicts universal defection in one-shot prisoners' dilemmas. Yet as Sally observes in a careful meta-analysis of scores of empirical studies, cooperation is actually quite common. This inconsistency is one of the most important puzzles of modern social science.

Sally's attempt to resolve it rests on a disarmingly simple proposition. In essence, he argues that people will cooperate with one another in prisoner's dilemmas if they can manage somehow to identify and sympathize sufficiently with one another. The power of his work lies in his detailed and persuasive account of how the development of identification and sympathy actually unfolds.

As Sally emphasizes, the search for a cooperative partner is not a quest to identify an indiscriminately trustworthy individual. Rather, it is a process of forging conditions that make us more likely to elicit cooperative tendencies in one another. In Sally's account, the emergence of sympathetic bonds among people is a complex dance entailing physical, cognitive, and emotional components. People feel one another out, respond to one another, choose to develop closer bonds with some, abandon further contact with others.

An important strand in Sally's account is that we are often remarkably mechanical in the ways we respond to the stimuli that drive these choices. He illustrates this idea with findings from experimental social psychology—noting, for example, that if a subject is pulling a lever toward herself when an experimenter shows her a Chinese ideograph, she is much more likely than control subjects to give the image a positive evaluation when queried about it later. In contrast, if the subject is pushing a lever away from herself when shown the ideograph, she is much more likely to give it a negative evaluation later. Similarly, if you put a pen between a subject's teeth—forcing him to smile, as it were—and then show him a cartoon, he is much more likely to find it funny than if he doesn't have a pen between his teeth.

Mechanical stimulus-response patterns of essentially the same sort, Sally argues, are strongly implicated in the processes by which sympathetic bonds form between people. He notes, for example, that an important component of normal sympathetic responses in relationships is a subconscious impulse to mimic what your conversation partner is doing. If she smiles, you smile. If she yawns, you yawn. If she leans to one side, you lean the same way. Although such mimicry turns out to be critically important, most people are not consciously aware of it.

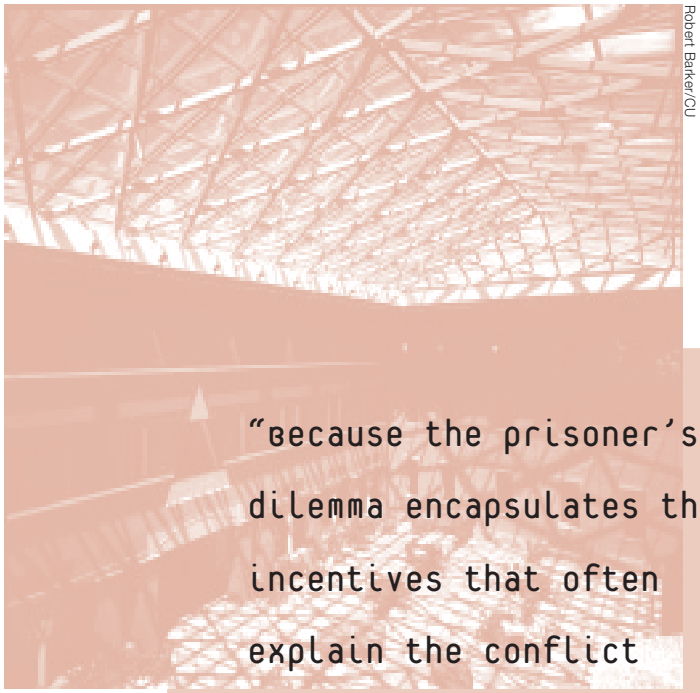
Sally cites one study, for example, in which a group of confederates had separate conversations with two groups of subjects—a control group in which the confederates interacted without special inhibition, and a treatment group in which the confederates consciously did not mimic the postures and other movements and expressions of their conversation partners. Subjects in the treatment

group reported generally negative feelings toward the experimenter's confederates, while those in the control group found the same confederates generally likable. Apart from the suppression of physical acts of mimicry in the treatment group, no other observable details of the interactions differed between groups. This finding is consistent with the view that people subconsciously interpret failure to mimic as signifying a deficit of sympathy.

Another important factor in the processes Sally describes is the concept of valence—an evaluation that is either positive or negative. Psychologists have identified a universal human tendency to assign an initial valence in response to virtually every category of stimulus—even words that may seem neutral, or photographs, or visual scenes of any kind. So, too, Sally argues, with persons. Thus, when you meet another person, you make an initial up-down categorization very quickly, probably before you are even consciously aware of it (if indeed you ever become consciously aware of it). Once the initial valence has been assigned, a biased cognitive filter becomes activated. You still evaluate further aspects of your experience with a new acquaintance, but with a slant. If the initial evaluation is positive, you are much more likely to treat ambiguous signals in a positive light, while the opposite is true in the case of negative initial evaluations. First impressions are often decisive.

Sally emphasizes that the process of bonding with another person influences, and is influenced by, physical proximity and orientation. Being too close invites a negative response, but so does being too far away (where "too close" and "too far" depend partly on cultural norms). The gaze is also important. Frequency and intensity of eye contact correlates strongly with the duration and intimacy of personal relationships. Among recent acquaintances, both extremely high levels of eye contact and extremely low levels often prove aversive. If experimenters seat subjects too close together, they will look at one another less frequently than if they are seated at a more comfortable distance.

In brief, as Sally demonstrates, the development of sympathetic bonds among people is a complex but coherent process. His detailed description of this process provides important clues about how sympathetic bonds enable people to solve one-shot prisoner's dilemmas. Sally's detailed review of the empirical prisoner's dilemma literature makes clear that the very same factors that promote the development of sympathetic bonds are also strongly predictive of cooperation in one-shot prisoner's dilemmas. Again, traditional rational choice theory all but rules out the possibility of such cooperation. The beauty of Sally's account is that, while remaining faithful to the spirit of the traditional rational actor model, it illuminates the actual processes by which people achieve mutual cooperation. It provides a principled explanation for why the traditional *Homo economicus* stereotype is, as the Nobel Laureate Amartya Sen once called him, a rational fool.



Robert Barker/CU

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The implications of Sally's work extend well beyond cooperation in social dilemmas. In other papers, for example, he has explored sympathy's role in our ability to discern meaning in everyday language. No statement, he notes, conveys a uniquely clear message independent of the context in which it is uttered. Yet context itself is often ambiguous. To make sense of what people tell us, we must adopt their perspective if we are to choose intelligently among competing interpretations. Sally's work in this area challenges several core propositions in game theory, among them the celebrated irrelevance of "cheap talk."

Most recently, Sally has embarked on an ingenious set of experiments designed to test his theories on the role of sympathy in communication. These experiments were inspired by a research strategy employed by neuroscientists, who attempt to discover how a specific brain region works by studying people whose brains have lesions in that region. Sally's adaptation is to study the behavior of autistic subjects in laboratory experiments. The analogy stems from the insight that although autistic persons are often extremely intelligent, they are also often unable to solve even the simplest problems that require taking the perspective of another. Sally's strategy in his new series of experiments is to illuminate the role of sympathy in normal communication by examining communications breakdowns involving autistic subjects. Preliminary results from these experiments confirm his conjecture that taking the perspective of your partner is indeed an important step in resolving one-shot prisoner's dilemmas.

Failure to achieve cooperation in social dilemmas is a tax on the human spirit. David Sally's work has deepened our understanding of the forces that influence cooperation in such settings, and in so doing has put us in a much better position to harness these forces for the common good.

While David Sally studies the forces that explain why cooperation often emerges spontaneously, his Johnson School colleague Kathleen O'Connor studies the forces that often contribute to its breakdown. In the field of dispute resolution, practitioners and scholars agree on one thing: negotiating a mutually beneficial settlement is better for the relationship than either sabotage or continued struggle. Yet breakdowns in negotiations are all too common. Do the obvious costs of failing to reach agreement, which can include not only important benefits forgone but also the disruptions of a prolonged dispute, have any lasting effects on how the negotiators behave in future encounters?

In a series of studies, O'Connor and co-author, Josh Arnold, addressed these questions by comparing how negotiators' behavior changed in the wake of either a successful agreement or an impasse. They paid particular attention to how negotiators' initial levels of confidence in their own abilities might affect their reactions in the two cases.

In keeping with their hypotheses, they found that negotiators who reached an impasse often interpreted their own performance as unsuccessful, experienced a great deal of anger and frustration with both the process and their outcomes, and developed negative perceptions of their counterparts. In terms of how they planned to behave in future negotiations, many reported that they were less willing to work together with other parties, planned to share less critical information with them, and planned to behave less cooperatively. Perhaps most discouraging, failure to reach agreement in a particular negotiation led many to lose faith in negotiations generally as an effective means of managing conflicts.

The silver lining in this research is that negotiators who had high levels of negotiation-related self-efficacy to begin with were buffered from some of these negative outcomes. In other words, negotiators who believed they had the skills to negotiate effectively viewed their failure at the table as no more than a temporary setback. They did not consider this experience to be diagnostic of their true abilities, and thus were more optimistic about their future successes and more willing to get back to the table to resolve their disputes.

O'Connor's research highlights the potentially useful contribution implicit in formal training of the sort she offers in her Johnson School courses. Negotiating is a skill that can be learned like any other. The better people become at it, the better they will be able to weather the occasional setbacks that confront all negotiators.

Robert H. Frank
Henrietta Johnson Louis Professor of Management

"In the field of dispute resolution, practitioners and scholars agree on one thing: negotiating a mutually beneficial settlement is better for the relationship than either sabotage or continued struggle. Yet breakdowns in negotiations are all too common."

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Kathleen O'Connor, Johnson Graduate School of Management

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